

**REMARKS/ARGUMENTS**

Claims 85-167 are present in this application.

Claims 85-96, 98, 99, 102, 104, 114-157 and 161-167 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 6,219,974 to Hoberman. This rejection is respectfully traversed.

In an Amendment filed October 23, 2009, Applicants referenced features of the invention that are distinguishable from the Hoberman patent. In particular, each of the independent claims recites that a density of selectable portions of the sheet is variable so that the sheet may be smoothly molded around complex shapes. Applicants argued that such localized density changes are impossible in the Hoberman structure. "Hoberman rather only discloses density changes that are constant throughout the whole sheet. That is, either the whole sheet expands, or the whole sheet contracts. It is not possible for one part of the sheet to expand while another contracts; nor is it possible for one part of the sheet to remain at constant density while another part expands or contracts." The arguments from the October 23 Amendment are herein incorporated by reference.

In reply, the Office Action contends that the Hoberman structure "is substantially identical to the claimed structure such that the PTO must presume claimed functions/properties to be inherent." The Office Action contends that it is Applicants' burden to obtain and test the prior art. Without conceding these contentions, Applicants engaged Dr. Ian A. Sutherland to conduct experiments on the prior art structure and to describe his findings. Dr. Sutherland's Declaration under 37 C.F.R. §1.132 is filed concurrently with this response. In the Declaration, Dr. Sutherland describes the structure and operation of the claimed invention and compares the same to the Hoberman structure. As is apparent from the experiments conducted by Dr.

Sutherland and his comments, the localized density changes according to the claimed invention in fact are impossible with the Hoberman structure.

Applicants thus respectfully submit the rejection over the Hoberman patent is misplaced. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 85-96, 98, 99, 102, 104, 114-157 and 161-167 were rejected under 35 U.S.C. §102(b) over U.S. Patent No. 6,425,703 to McDonnell. With reference to the remarks from the October 23 Amendment and the comments and conclusions in Dr. Sutherland's 132 Declaration, Applicants submit that the rejection over the McDonnell patent is also misplaced. Withdrawal of the rejection is requested.

Claims 85-96, 98, 99, 102, 104, 114-157 and 161-167 were rejected under 35 U.S.C. §103(a) over Hoberman in view of McDonnell. In view of the discussion above and the 132 Declaration filed herewith, Applicants submit that this rejection is also misplaced. Withdrawal of the rejection is requested.

In the "Response to Arguments" section in the Office Action, the Examiner contends that the features relied upon to distinguish the prior art amount to "intended use" or a "functional" limitation. Applicants respectfully take issue with this contention. The claims recite that the density of selectable portions of the sheet is variable . . . , which is neither functional nor an intended use. Rather, as would be appreciated by those of ordinary skill in the art, a localized variable density is a *structural* feature of the invention that should not simply be overlooked and/or disregarded as mere function or intended use. In addition, the experiments conducted by Dr. Sutherland and his 132 Declaration corroborate Applicants' contentions and demonstrate the differences between the invention and the references of record.

In view of the foregoing remarks, Applicants respectfully submit that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to Deposit Account No. 14-1140.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By:           /Alan M. Kagen/            
                                Alan M. Kagen  
                                Reg. No. 36,178

AMK:jl  
901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100